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## => D HIS

FILE 'LREGISTRY' ENTERED AT 20:13:44 ON 15 DEC 2010 L1 STR

FILE 'REGISTRY' ENTERED AT 20:20:12 ON 15 DEC 2010

L2 SCR 2043

L3 0 S L1 AND L2

FILE 'LREGISTRY' ENTERED AT 20:20:22 ON 15 DEC 2010

L4 STR L1

FILE 'REGISTRY' ENTERED AT 20:22:17 ON 15 DEC 2010

L5 3 S L4 AND L2

L6 STR L4

L7 0 S L6 AND L2

L8 50 S L4

L9 1187 S L4 FUL

SAV L9 CON424/A

E PMS/CI

L10 1371382 S E3

L11 35 S L10 AND L9

FILE 'HCA' ENTERED AT 20:29:05 ON 15 DEC 2010

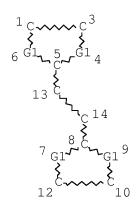
L12 14 S L11

L13 10 S 1802-2003/PY, PRY, AY AND L12

FILE 'REGISTRY' ENTERED AT 20:31:21 ON 15 DEC 2010

=> D L9 QUE STAT

L4 STR



VAR G1=O/S
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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STEREO ATTRIBUTES: NONE

L9 1187 SEA FILE=REGISTRY SSS FUL L4

100.0% PROCESSED 1482003 ITERATIONS ( 8 INCOMPLETE) 1187 ANSWERS SEARCH TIME: 00.00.02

=> FILE HCA

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=> D L13 1-10 BIB ABS HITSTR HITRN RE

L13 ANSWER 1 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 141:382155 HCA Full-text

TI Electrode active material for electrochemical device

IN Inatomi, Yuu; Shimada, Mikinari

PA Matsushita Electric Industrial Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DT Patent LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 20040214082	A1	20041028	US 2004-827424	20040420
	EP 1478040	A1	20041117	EP 2004-252356	20040421
	EP 1478040	B1	20080423		
	JP 2004342605	A	20041202	JP 2004-124954	20040421
	JP 4468058	B2	20100526		
	CN 1540786	А	20041027	CN 2004-10035314	20040422
	CN 1264237	С	20060712		
PRAI	JP 2003-116843	A	20030422		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 141:382155

GΙ

AB An electrochem. device of the present invention comprises a pos. electrode, a neg. electrode and an electrolyte, wherein at least one of the pos. electrode and the neg. electrode includes a compd. having a structure represented by the general formula (I); where X is a S atom, a N atom, or an O atom, each of R1 to R4 is independently a linear or cyclic aliph. group, a H atom, a -OH group, a cyano group, an amino group, a nitro group, or a nitroso group; each of R5 and R6 is independently a linear or cyclic aliph. group, the aliph. group includes ≥1 selected from the group consisting of an O atom, a N atom, a S atom, a Si atom, a P atom, a B atom, and a halogen atom. It is thereby possible to obtain a lightwt. and high energy-d. electrochem. device having an excellent cycle characteristic.

IT 782452-24-8P 782452-26-0P

(electrode active material for electrochem. device)

RN 782452-24-8 HCA

CN 1,3-Dithiole, 2,2'-(1,2-ethanediylidene)bis-, polymer with ethene (9CI) (CA INDEX NAME)

CRN 88312-71-4 CMF C8 H6 S4

$$\begin{array}{c}
\mathbb{S} \\
\mathbb{S}
\end{array}$$

$$\mathbb{C}H - \mathbb{C}H \longrightarrow \mathbb{S}$$

CM 2

CRN 74-85-1 CMF C2 H4

H2C==CH2

RN 782452-26-0 HCA

CN 1,3-Dithiole, 2-(1,3-dithiol-2-ylideneethylidene)-4-(2-propynyl)-, polymer with ethyne (9CI) (CA INDEX NAME)

CM 1

CRN 782452-25-9 CMF C11 H8 S4

$$HC = C - CH_2$$
 $S = CH - CH$ 
 $S = CH - CH$ 

CM 2

CRN 74-86-2 CMF C2 H2

нс≡≡сн

## IT 782452-24-8P 782452-26-0P

(electrode active material for electrochem. device)

# OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L13 ANSWER 2 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 137:370466 HCA Full-text

TI Acrylic esters containing 1,3-dithiolane linkage and their use for optical materials

IN Nakamura, Mitsuo; Imai, Masao; Otsuji, Atsuo

PA Mitsui Chemicals, Inc., Japan

SO PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PAT	TENT NO.	KIND	DATE	AP	PLICATION NO.	DATE
ΡI	WO	2002092591	A1	20021121	WO	2002-JP4695	20020515
	AU	2002308979	A1	20021125	AU	2002-308979	20020515
	AU	2002308979	B2	20040923			
	JP	2003160615	А	20030603	JP	2002-140663	20020515
	JP	3820183	B2	20060913			
	EP	1388540	A1	20040211	EP	2002-769605	20020515
	ΕP	1388540	В1	20070905			
	CN	100344623	С	20071024	CN	2002-801665	20020515
	US	20040102592	A1	20040527	US	2003-332742	20030113
	US	6835844	B2	20041228			
PRAI	JP	2001-144539	A	20010515			
	JΡ	2001-144540	A	20010515			
	JΡ	2001-266422	A	20010903			
	JΡ	2001-281859	A	20010917			
	MO	2002-JP4695	M	20020515			

OS MARPAT 137:370466

AB Acrylic esters which are polymerizable in a short time and useful for optical resins with good heat, mech. and refractive properties are diacrylic esters having dithiolane linkage. Acid condensation of 2,3-dimercapto-1-propanol with glyoxal, treating the resulting 2,2'-bis[(4-hydroxymethyl)dithiolane] with thiourea, hydrolysis of the thiouronium salt, treating the resulting dithiol with 3-chloropropionic acid, and treating with Et3N gave 2,2'-bis[(4-acryloylthiomethyl)dithiolane]. The dithiolane was UV cured with Darocur 1173 in a cell, giving a transparent test piece with refractive index 1.681, Abbe no. 34.6, sp. gr. 1.4, and glass temp. 123°.

#### IT 475577-82-3P

(manuf. of acrylic esters contg. 1,3-dithiolane linkage for optical materials)

RN 475577-82-3 HCA

CN 2-Propenethioic acid, S,S'-[1,2-ethanediylebis(1,3-dithiolane-2,4-diylmethylene)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 475577-77-6 CMF C16 H22 O2 S6

$$H_2C = CH - \stackrel{\circ}{C} - S - CH_2 - \stackrel{\circ}{S} - CH_2 - CH_2 - \stackrel{\circ}{S} - CH_2 - S - \stackrel{\circ}{C} - CH = CH_2$$

#### IT 475577-82-3P

(manuf. of acrylic esters contg. 1,3-dithiolane linkage for optical materials)

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- (9) Mitsui Chem Inc; EP 1057808 A2 2000 HCA
- (10) Mitsui Chem Inc; CN 1283614 A 2000 HCA
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- (13) Mitsui Petrochem Ind Co Ltd; JP 04-321662 A 1992 HCA
- OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
- L13 ANSWER 3 OF 10 HCA COPYRIGHT 2010 ACS on STN
- AN 137:140883 HCA Full-text
- TI Poly(dibenzylidenetetrathiapentalene): A Redox-Active, Linearly Extended TTF Polymer
- AU Divisia-Blohorn, Bernadette; Genoud, Francoise; Salhi, Fouad; Mueller, Harald
- CS Laboratoire d'Electrochimie Moleculaire et Structure des Interfaces and Laboratoire de Physique des Metaux Synthetiques, Unite Mixte de Recherche CEA-CNRS-Univ.-J. Fourier N° 5819, Grenoble, 38054, Fr.
- SO Journal of Physical Chemistry B (2002), 106(26), 6646-6651 CODEN: JPCBFK; ISSN: 1089-5647
- PB American Chemical Society
- DT Journal
- LA English
- The  $\pi$ -conjugated polymers composed of vinylogous tetrathiafulvalene (TTF) units were obtained by electrochem. polymn. of 2,5-di(benzylidene)-1,3,4,6-tetrathiapentalene or of its corresponding dimer 1,2-bis(5-benzylidene[1,3]-dithiolo[4,5-d]1,3-dithiole-2-ylidene)-1,2-diphenylethane. The polymers were characterized by cyclic voltammetry (CV), in situ ESR spectroscopy and in situ cond. measurements to gain insight into the charge-discharge behavior and the electronic properties as a function of applied potential. Our results suggest that both compds. behave as conducting polymers exhibiting multistep redox activity. In situ ESR studies show that charge-

discharge phenomena differ in the nature of the charge storage configuration depending on whether they are investigated during a cathodic or anodic scan. Redn. of a polymer film generated at an applied potential of +1.6 V vs SCE allows for the detection of three clearly discernible maxima of the spin d. at 0.60, 0.95, and about 1.25 V vs Ag, while subsequent reoxidn. gives rise to only one spin d. max. at around 0.65 V vs Ag. Coulometric studies suggest that the spin d. max. at around 0.60-0.65 V vs Ag is assocd. with one pos. charge per tetrathiapentalene unit of poly-1 while each monomer bears up to two charges at a potential of 1.6 V vs Ag. In situ and conventional four-probe measurements of the elec. cond. gave values of around 5 + 10-5 S cm-1.

IT 444874-87-7P

(prepn. and electrochem. properties of)

RN 444874-87-7 HCA

CN [1,3] Dithiolo [4,5-d]-1,3-dithiole,

2,2'-(1,2-diphenyl-1,2-ethanediylidene)bis[5-(phenylmethylene)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 189077-89-2 CMF C36 H22 S8

IT 444874-87-7P

(prepn. and electrochem. properties of)

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- OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L13 ANSWER 4 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 136:200988 HCA Full-text

TI 4-Methylene-1,3-dioxolanes as odorless crosslinking agents

IN Hartl, Helmut; Frings, Rainer B.; Grahe, Gerwald F.

PA Dainippon Ink and Chemicals, Inc., Japan

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 1182201	A1	20020227	EP 2000-118116	20000825
	EP 1182201	B1	20041124		
	ES 2233255	Т3	20050616	ES 2000-118116	20000825
	CA 2355749	A1	20020225	CA 2001-2355749	20010821
	CA 2355749	С	20080923		
	US 20020045674	A1	20020418	US 2001-934655	20010823
	US 6844375	B2	20050118		
	JP 2002155073	A	20020528	JP 2001-254419	20010824
PRAI	EP 2000-118116	A	20000825		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 136:200988

GΙ

$$X \longrightarrow (O) m - (CH_2) n \longrightarrow CH_2$$

The invention relates to 4-methylene-1,3-dioxolanes of the general formula I AΒ wherein R1 denotes H, C5-6-cycloalkyl or C1-4-alkyl; m and n, which may be the same or different, denote 0 or 1, whereby m  $\leq$  n, o denotes 2, 3 or 4 depending on the valency of the group X; and X denotes a C-C single bond, straight-chain or branched C1-18-alkylene, C5-6-cycloalkylene, C8-18arylalkylene, -CH2(OCH2CH2)pOCH2-, -CH2(OCH(CH3)CH2)pOCH2-, wherein p is an integer from 0 to 100, a process for their prodn. and intermediate products used. Moreover, compns. capable of emission-free, photocationic crosslinking, which comprise 4-methylene-1,3-dioxolanes of the general formula I and their use for the prodn. of solvent-resistant and transparent films. Thus, heating 500 g a .apprx.50% aq. glutardialdehyde soln. with 600 q 3-chloro-1,2-propanediol and .apprx.400 mL PhMe to boiling while removing water (340 mL) over 3-4 h, cooling to room temp., washing, drying, removing PhMe by a rotary evaporator and distg. the residue gave 627 g (88%) 1,3bis(4-chloromethyl-1,3-dioxolane-2-yl)propane (II) with b.p. 138-140° (5x10-3 mbar). Adding II to K tert-butylate dissolved in dry THF while

maintaining at below  $50\,^{\circ}$  then stirring at room temp. for 24 h and working up gave

1,3-bis(4-methylene-1,3-dioxolane-2-yl)propane.

IT 401794-52-3P 401794-55-6P 401794-63-6P

(manuf. of 4-methylene-1,3-dioxolanes as odorless crosslinking agents)

RN 401794-52-3 HCA

CN 1,3-Dioxolane, 2,2'-(1,2-ethanediyl)bis[2-methyl-4-methylene-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 401794-51-2 CMF C12 H18 O4

$$\begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 \\ \end{array}$$

RN 401794-55-6 HCA

CN 1,3-Dioxolane, 2,2'-(1,3-propanediyl)bis[4-methylene-, polymer with 2,2'-(1,2-ethanediyl)bis[2-methyl-4-methylene-1,3-dioxolane] (9CI) (CA INDEX NAME)

CM 1

CRN 401794-51-2 CMF C12 H18 O4

$$\begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 \\ \end{array}$$

CM 2

CRN 401793-74-6 CMF C11 H16 O4

$$H_2C$$
  $O$   $(CH_2)_3$   $O$   $CH_2$ 

RN 401794-63-6 HCA

CN 1,3-Dioxolane, 2,2'-(1,2-ethanediyl)bis[2-methyl-4-methylene-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[4-methylene-1,3-dioxolane] (9CI) (CA INDEX NAME)

CM 1

CRN 401794-51-2 CMF C12 H18 O4

$$\begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 \\ \end{array}$$

CM 2

CRN 401793-97-3 CMF C25 H28 O6

# IT 401794-52-3P 401794-55-6P 401794-63-6P

(manuf. of 4-methylene-1,3-dioxolanes as odorless crosslinking agents)

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L13 ANSWER 5 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 133:80761 HCA Full-text

TI New electrochemically synthesized copolymers: poly(difluorenyl-ethylenes)

AU Lorcy, Dominique; Rault-Berthelot, Joelle; Poriel, Cyril

CS Synthese et Electrosynthese Organiques, UMR CNRS 6510, Universite de Rennes 1, Rennes, 35042, Fr.

SO Electrochemistry Communications (2000), 2(6), 382-385 CODEN: ECCMF9; ISSN: 1388-2481

PB Elsevier Science B.V.

DT Journal

LA English

AB Synthesis and cyclic voltammetry data of novel copolymers contg. difluorenyl-ethylene units in the conjugated backbone are reported. The dimer of 2-(dithiafulvenyl)fluorene is chem. and electrochem. formed and electropolymd. and voltammetry of the polymer studied. 1,2-Difluorenyl-1,2-dimethylethene is also electrochem. polymd.

IT 279668-55-2P

(electrochem. prepn. and cyclic voltammetry in CH2Cl2)

RN 279668-55-2 HCA

CN 1,3-Dithiole, 2,2'-(1,2-di-9H-fluoren-2-yl-1,2-ethanediylidene)bis[4,5-dimethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 279668-52-9 CMF C38 H30 S4

IT 279668-55-2P

(electrochem. prepn. and cyclic voltammetry in CH2Cl2)

RE CITED REFERENCES

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- OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
- L13 ANSWER 6 OF 10 HCA COPYRIGHT 2010 ACS on STN
- AN 131:18963 HCA Full-text
- TI Synthesis, X-ray Structure, and Electrochemical Oxidative Coupling Reactions of 1,5- and 2,6-Bis(1,4-dithiafulven-6-yl)naphthalenes
- AU Gonzalez, Susana; Martin, Nazario; Sanchez, Luis; Segura, Jose L.; Seoane, Carlos; Fonseca, Isabel; Cano, Felix H.; Sedo, Josep; Vidal-Gancedo, Jose; Rovira, Concepcio
- CS Departamento de Quimica Organica Facultad de Quimica, Universidad Complutense, Madrid, E-28040, Spain
- SO Journal of Organic Chemistry (1999), 64(10), 3498-3506 CODEN: JOCEAH; ISSN: 0022-3263
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 131:18963
- AB Novel  $\pi$ -extended tetrathiafulvalene (TTF) derivs. I and II [R = H, SMe; RR = SCH2CH2S; R1 = Hexyl, Me], in which the two 1,3-dithiole units are connected through a naphthalene spacer, have been prepd. in high yields by Wittig-Horner olefination reaction of dialkoxy diformylnaphthalenes and substituted phosphonate esters. The electrochem. study revealed a similar behavior for the novel electron donor mols. I and II regardless of the position of the 1,3-dithiole rings on the naphthalene core. The extended donors undergo an efficient electrooxidn. process affording new oligomeric extended TTF species which exhibit lower oxidn. potential values than their precursor donors. EPR expts. confirm the presence of the cation radical derived from the oligomeric TTF vinylogues and support an ECE (electrochem.-chem.electrochem.) process. The structural study has been carried out by X-ray anal. of I [R = H; R1 = Hexyl] and semiempirical PM3 calcns. and reveals a distorted geometry from planarity with the naphthalene moiety forming an angle of .apprx.35° with the thiafulvalene rings. A good agreement was

found between the exptl. and calcd. values, thus validating the PM3 method. The chem. oxidn. of I and II with strong electron acceptors give charge transfer complexes (CTC) which were characterized by UV-vis, FTIR, and EPR spectroscopy.

IT 226698-09-5p 226698-11-9p 226698-13-1p 226698-14-2p 226698-15-3p 226698-17-5p 226698-18-6p 226698-19-7p 226698-20-0p 226698-21-1p

(charge transfer complex; mol. structure and electrochem. oxidative coupling of tetrathiafulvenes contg. naphthalene spacers prepd. by Wittig-Horner olefination of dithiolylphosphonate esters with diformylnaphthalenes)

RN 226698-09-5 HCA

Propanedinitrile, 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(1,5-dimethoxy-2,6-naphthalenediyl)[1,2-bis[4,5-bis(methylthio)-1,3-dithiol-2-yl]-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CN

CRN 226698-08-4 CMF (C24 H24 O2 S8)n CCI PMS

CM 2

CRN 1518-16-7 CMF C12 H4 N4

RN 226698-11-9 HCA

CN Propanedinitrile, 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(4,8-dimethoxy-1,5-naphthalenediyl)[1,2-bis(1,3-dithiol-2-yl)-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-10-8 CMF (C20 H16 O2 S4)n

CCI PMS

CM 2

CRN 1518-16-7 CMF C12 H4 N4

RN 226698-13-1 HCA

CN 1,4-Cyclohexadiene-1,2-dicarbonitrile, 4,5-dichloro-3,6-dioxo-, compd. with poly[(1,5-dimethoxy-2,6-naphthalenediyl)[1,2-bis(1,3-dithiol-2-yl)-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CRN 226698-12-0

CMF (C20 H16 O2 S4)n

CCI PMS

CM 2

CRN 84-58-2

CMF C8 C12 N2 O2

RN 226698-14-2 HCA

CN 1,4-Cyclohexadiene-1,2-dicarbonitrile, 4,5-dichloro-3,6-dioxo-, compd. with poly[(1,5-dimethoxy-2,6-naphthalenediyl)[1,2-bis[4,5-bis(methylthio)-1,3-dithiol-2-yl]-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-08-4

CMF (C24 H24 O2 S8)n

CRN 84-58-2

CMF C8 C12 N2 O2

RN 226698-15-3 HCA

CN 1,4-Cyclohexadiene-1,2-dicarbonitrile, 4,5-dichloro-3,6-dioxo-, compd. with poly[(4,8-dimethoxy-1,5-naphthalenediyl)[1,2-bis(1,3-dithiol-2-yl)-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-10-8

CMF (C20 H16 O2 S4)n

CRN 84-58-2 CMF C8 C12 N2 O2

RN 226698-17-5 HCA

CN 1,4-Cyclohexadiene-1,2-dicarbonitrile, 4,5-dichloro-3,6-dioxo-, compd. with poly[(4,8-dimethoxy-1,5-naphthalenediyl)[1,2-bis[4,5-bis(methylthio)-1,3-dithiol-2-yl]-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-16-4

CMF (C24 H24 O2 S8)n

CRN 84-58-2 CMF C8 C12 N2 O2

RN 226698-18-6 HCA

Cyanamide, (2,3-dichloro-5,6-dimethyl-2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(1,5-dimethoxy-2,6-naphthalenediyl)[1,2-bis(1,3-dithiol-2-yl)-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CN

CRN 226698-12-0

CMF (C20 H16 O2 S4)n

CRN 157788-94-8 CMF C10 H6 C12 N4

RN 226698-19-7 HCA

CN Cyanamide, (2,3-dichloro-5,6-dimethyl-2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(1,5-dimethoxy-2,6-naphthalenediyl)[1,2-bis[4,5-bis(methylthio)-1,3-dithiol-2-yl]-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-08-4 CMF (C24 H24 O2 S8)n

CRN 157788-94-8 CMF C10 H6 C12 N4

RN 226698-20-0 HCA

CN Cyanamide, (2,3-dichloro-5,6-dimethyl-2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(4,8-dimethoxy-1,5-naphthalenediyl)[1,2-bis(1,3-dithiol-2-yl)-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-10-8 CMF (C20 H16 O2 S4)n CCI PMS

CM 2

CRN 157788-94-8 CMF C10 H6 C12 N4

RN 226698-21-1 HCA

CN Cyanamide, (2,3-dichloro-5,6-dimethyl-2,5-cyclohexadiene-1,4-diylidene)bis-, compd. with poly[(4,8-dimethoxy-1,5-naphthalenediyl)[1,2-bis[4,5-bis(methylthio)-1,3-dithiol-2-yl]-1,2-ethenediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 226698-16-4 CMF (C24 H24 O2 S8)n

CCI PMS

CM 2

CRN 157788-94-8 CMF C10 H6 C12 N4

TT 226698-09-5P 226698-11-9P 226698-13-1P 226698-14-2P 226698-15-3P 226698-17-5P 226698-18-6P 226698-19-7P 226698-20-0P 226698-21-1P

(charge transfer complex; mol. structure and electrochem. oxidative coupling of tetrathiafulvenes contg. naphthalene spacers prepd. by Wittig-Horner olefination of dithiolylphosphonate esters with diformylnaphthalenes)

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- OSC.G 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)
- L13 ANSWER 7 OF 10 HCA COPYRIGHT 2010 ACS on STN
- AN 107:64917 HCA Full-text
- OREF 107:10649a,10652a
- TI Decrosslinkable surgical materials
- IN Hishida, Yasuto
- PA Toyo Contact Lens Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 8 pp.
  - CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 62053664	А	19870309	JP 1985-192989	19850830
PRAI	JP 1985-192989		19850830		

Copolymer contg. a crosslinking agent with covalent bond capable to be opened and lost crosslinking effect by acid treatment have processable hardness before the treatment and air permeability, water absorbability, and flexibility after the treatment. A mixt. of lauryl methacrylate 36, 1,2-bis[2-(4-methacyloyloxymethyl-2-methyl-1,3-dioxolanyl)]ethane 64, and 2,2'-azobis(2,4-dimethylvaleronitrile) 0.1 part was heated 24 h at 35°, 24 h at 50°, and 24 h at 50-110°, processed and polished to give an article, swelled overnight in water, dipped overnight in 4 N aq. HCl, neutralized with 1% aq. Na2CO3, dipped overnight in water, and dipped in boiling salt soln. to give an article having Rockwell hardness 0.5, water content 37.8%, O(g) permeability 16.9 + 1010 cm3.cm/cm2.s.cmHg, and good transparency.

## IT 109664-69-9

(acid treatment of, for prosthetic materials)

- RN 109664-69-9 HCA
- CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis[(2-methyl-1,3-dioxolane-2,4-diyl)methylene] ester, polymer with dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 109664-68-8 CMF C20 H30 O8

$$\begin{array}{c|c} ^{H2C} \bigcirc \\ \text{Me-C-C-O-CH2} \longrightarrow \\ \text{O} \end{array} \begin{array}{c} ^{Me} \bigcirc \\ \text{CH}_2 - \text{CH}_2 \end{array} \begin{array}{c} ^{Me} \bigcirc \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \end{array}$$

CM 2

CRN 142-90-5 CMF C16 H30 O2

#### TT 109664-69-9

(acid treatment of, for prosthetic materials)

L13 ANSWER 8 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 80:37494 HCA Full-text

OREF 80:6165a,6168a

TI Synthesis of a hybrid spiro-ladder polymer

AU Bailey, William J.; Feinberg, Jay H.

CS Dep. Chem., Univ. Maryland, College Park, MD, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1972), 13(1), 287-91
CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

The dispiro bisdiene 3,4,11,12-tetramethylene-1,6,9,14-tetraoxadispiro[6.2.6.2]octadecane (I) was prepd. by heating 3,4,11,12-di(2'-dioxothiopropano)-1,6,9,14-tetraoxadispiro[6.2.6.2]-3,11-octadecadiene [obtained from 3,4-di(hydroxymethyl)-2,5-dihydrothiophene 1,4-dioxide and 1,4-cyclohexanedione] at 200-15.deg. for 45 min. to release SO2. The I was treated with the 20-membered tetramethylene glycol maleate cyclic dimer in DMF 1 day at 5.deg., 8 days at room temp., and 1 day at 76.deg. to yield 52% polymer (II) [50601-59-7]. II was infusible but sol. in hexafluoroisopropanol at room temp. and in glutaronitrile (III) at 180.deg.. When prepd. in a III-CH2Cl2 mixt. at 5.deg. for 1 day, room temp. for 4

days, and  $110.\deg$  for 1 day, the II was cryst. and was sol. in CH2Cl2 at room temp.

IT 50979-25-4P

(prepn. of)

RN 50979-25-4 HCA

CN Poly(6,6a,7,9,10,11,12,14a,15,16,21,21a,22,24,25,26,27,29,29a,30-eicosahydro-7,14,22,29-tetraoxo-1H,5H,14H,20H-[1,6,11,16]tetraoxacycloeicosino[3,4-h:13,14-h']bis[2,4]benzodioxepin-

3,18-diylidene-18,18-di-1,2-ethanediyl) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 50979-25-4P

(prepn. of)

L13 ANSWER 9 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 78:16492 HCA Full-text

OREF 78:2627a,2628a

TI New spiro polymers containing five-, six-, seven-, and eight-membered cyclic ketals

AU Bailey, William John; Beam, Carles F., Jr.; Haddad, Ibrahim

CS Dep. Chem., Univ. Maryland, College Park, MD, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1971), 12(1), 169-76
CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

Tetrols prepd. were treated with cyclic diketones to give polyspiroketal AΒ ladder polymers. Spiro monomers prepd. include 7,14,21,26tetraoxatetraspiro[5.2.2.2.5.2.2]hexacosane [37571-44-1], 7,14,21,25tetraoxatetraspiro[5.2.2.2.5.2.1.2]-23-pentacosanone [37571-45-2], and cis, cis-2, 3:10, 11-bis (tetramethylene) -1, 4, 9, 12tetraoxadispiro[4.2.4.2]tetradecane [37571-46-3]. Also prepd. were 1,4cyclohexanedione-1,1,4,4-tetrakis(hydroxymethyl)cyclohexane copolymer (I) [37450-54-7], 1,4-cyclohexanedione-1,2,4,5tetrakis(hydroxymethyl)cyclohexane copolymer (II) [37450-55-8], 1,4cyclohexanedione-2,2,5,5-tetrakis(hydroxymethyl)cyclopentanone copolymer (III) [37450-56-9], meso diastereomeric cis, cis-1,2,4,5-cyclohexanetetrol-1,4-cyclohexanedione copolymer (IV) [37450-57-0], 2,7-decalindione-1,2,4,5tetrakis(hydroxymethyl)cyclohexane copolymer (V) [37450-58-1], and 1,4,5,8tetrakis(hydroxymethyl)-1,2,3,4-tetrahydronaphthalene-1,4- cyclohexanedione copolymer (VI) [37450-59-2].

IT 39723-72-3P 39723-73-4P 39723-74-5P 39861-81-9P

(prepn. of)

RN 39723-72-3 HCA

CN Poly[(hexahydrobenzo[1,2-d:4,5-d']bis[1,3]dioxole-2,6-diylidene)-6,6-di-1,2-ethanediyl] (9CI) (CA INDEX NAME)

RN 39723-73-4 HCA

CN Poly(octahydro-1H,5H-benzo[1,2-e:4,5-e']bis[1,3]dioxepin-3,9-diylidene-9,9-di-1,2-ethanediyl) (9CI) (CA INDEX NAME)

RN 39723-74-5 HCA

CN Poly[(7-oxo-2,4,10,12-tetraoxadispiro[5.1.5.3]hexadecane-3,11-diylidene)-11,11-di-1,2-ethanediyl] (9CI) (CA INDEX NAME)

RN 39861-81-9 HCA CN Poly[(1,5,5a,6,7,7a,8,12-octahydronaphtho[1,8-ef:4,5-e'f']bis[1,3]dioxocin-3,10-diylidene)-10,10-di-1,2-ethanediyl] (9CI) (CA INDEX NAME)

IT 39723-72-3P 39723-73-4P 39723-74-5P 39861-81-9P

(prepn. of)

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L13 ANSWER 10 OF 10 HCA COPYRIGHT 2010 ACS on STN

AN 77:20050 HCA Full-text

OREF 77:3365a,3366a

TI Synthesis of sulfur-containing spiro polymers

AU Bailey, William J.; Hinrichs, Robert L.

CS Dep. Chem., Univ. Maryland, College Park, MD, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1970), 11(2), 598-605
CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

C(CH2SH)4 (I) and cyclohexanone (using p-toluenesulfonic acid catalyst) gave 7,11,18,21-tetrathiatrisopiro[5.2.2.5.2.2]heneicosane (II) [183-11-9], while 1,3-propanedithiol and 1,4-cyclohexanedione (III) gave 2,5,10,14-tetrathiadispiro[5.2.5.2]hexadecanes (IV) [34982-16-6]. I and III gave poly[3.3-bis(thiamethyl)-1,5- dithiaspiro[5.5]undecan-9-xylidene] (V) [34937-23-0], while I and 1,10-cyclooctadecanedione gave poly[3,3-

bis(thiamethyl)-1,5-dithiospiro[5.17]tricosan-15-ylidene] (VI) [34978-50-2]. II, IV, V, and VI were oxidized to their sulfones and(or) sulfoxides.

IT 34937-23-0P 36812-74-5P 36813-57-7P

(prepn. of)

RN 34937-23-0 HCA

CN Poly(2,4,8,10-tetrathiaspiro[5.5]undecane-3,9-diylidene-9,9-di-1,2-ethanediyl) (9CI) (CA INDEX NAME)

RN 36812-74-5 HCA

CN Poly[(2,4,8,10-tetraoxido-2,4,8,10-tetrathiaspiro[5.5]undecane-3,9-diylidene)-9,9-di-1,2-ethanediyl] (9CI) (CA INDEX NAME)

RN 36813-57-7 HCA

CN Poly[(2,2,4,4,8,8,10,10-octaoxido-2,4,8,10-tetrathiaspiro[5.5]undecane-3,9-diylidene)-9,9-di-1,2-ethanediyl] (9CI) (CA INDEX NAME)

IT 34937-23-0P 36812-74-5P 36813-57-7P (prepn. of)